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The effect of institutional and electoral structures
on external political efficacy.
A comparative investigation of 33 countries.

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Abstract

There is a large variation in the openness of political systems to the attempts of citizens to influence public policy. Open political systems are therefore often associated with higher levels of external political efficacy. We test this claim by investigating the relation between institutional structures and levels of external political efficacy, using the International Social Survey Program (2004). We find in contrast to expectations no relation between federalism and external efficacy. In line with the hypotheses a curvilinear relation between external efficacy and electoral proportionality was found: in both open and closed political systems high levels of external efficacy are documented. We show that some elements of institutional openness are related more strongly to external efficacy among citizens with higher levels of political sophistication and we argue that these citizens are better able to pick up the signals being sent out by the political system.

Keywords: external efficacy, institutional structures, political sophistication, proportionality, International Social Survey Program

1. Introduction

In a famous quote, Dahl (1971, p. 1) has argued that “the key characteristic of a democracy is the continuing responsiveness of the government to the preferences of its citizens”. Empirical research, however, has shown important variations with regard to the degree of responsiveness: while some political systems can be considered as relatively open for the attempts of citizens to influence public policy, other systems are portrayed as much more closed (Kriesi, Koopmans, Duyvendak, & Giugni, 1995; Lijphart, 2012). Put differently, democracies are characterized by institutional structures that function either as incentives or as disincentives for citizens to become politically active (Tarrow, 1996). A general assumption in the literature is that as open political systems provide more opportunities to citizens to express their preferences, they should be associated with higher levels of political efficacy. On the other hand, closed political systems are expected to be associated with feelings of political powerlessness (Coleman & Davis, 1976; Corcoran, Pettinicchio, & Young, 2011).

The idea that the openness of institutional structures is associated with the feeling of political efficacy is voiced most strongly in the literature on voting behavior and in the literature on the political opportunity structure approach to the study of social movements. Despite this apparent consensus, at least three points remain open to debate. First, there are competing claims about what specific institutional structures are associated with political efficacy. Although federalism and proportionality are among the most frequently discussed institutional structures that affect the openness of a political system (e.g. Kriesi et al., 1995; Lijphart, 2012; Norris, 2008), different studies offer competing claims about the importance of these aspects (Blais, 2006; Hellwig, Mikulska, & Gezgor, 2010). Second, there is no consensus about the direction of each of these effects. In particular, with regard to electoral proportionality we find competing claims in the literature. For instance, Karp and Banducci (2008, p. 330) expect higher levels of political efficacy in proportional systems as proportionality reduces “the proportion of citizens who believe their vote makes little difference in elections”. Others, however, have argued that in majoritarian systems a vote can make more of a difference as these systems offer more accountability. It is argued that proportional systems typically are characterized by coalition governments which leave citizens with less political influence: “With key decisions one step removed from the electorate, voters will feel less efficacious” (Brockington, 2004, p. 470). It remains to be investigated therefore whether political systems that are characterized as ‘open’ in the

literature are indeed associated with higher levels of political efficacy. Third, it is debated whether all citizens pick up the signals that are being sent out by the political system. We argue that the relation between institutional structures and political efficacy is not the same across all groups in society, but that this relation is dependent on the level of political sophistication of citizens (Coleman & Davis, 1976; Hellwig et al., 2010).

In this paper we address these three research questions by means of a cross-national analysis of the relation between political efficacy and two types of institutional structures that are often claimed to affect institutional openness (i.e. federalism and proportionality). Using a multi-level analysis on 33 countries, we first investigate the direct relation between proportionality, federalism and the level of political efficacy of citizens. Second, we investigate the direction of these relations. Given that competing studies argue that more proportional as well as more disproportional electoral systems are associated with political efficacy, we propose a curvilinear model that brings together both claims. Third, we inquire whether the relation between institutional structures and political efficacy is stronger for politically more sophisticated citizens.

2. The linkage between institutional structures and political efficacy

Studying the linkage between the institutional structures of a political system and the feelings among its citizens that they can have an impact on the political process has a long tradition. Already half a century ago, Almond and Verba (1963) underlined the importance of studying the relation between the institutional structures and the political culture of a country. Their seminal study of five countries showed that citizens living in more inclusive political systems in general have a stronger belief they can influence the course of governmental decisions (1963, p. 137). In this study we build on this school of thought that links the institutional structures of political system with the attitudes of its citizens. In particular we focus on political efficacy which has been defined as “the feeling that individual political action does have, or can have, an impact upon the political process, (...) the feeling that political and social change is possible, and that the individual citizen can play a part in bringing about this change” (Campbell, Gurin, & Miller, 1954, p. 187). As political efficacy addresses both the sense that one can exert influence, as well as the belief that the political system is open and responsive to these attempts, a distinction was made between internal and external efficacy with internal efficacy referring to “beliefs about one's own competence to understand, and to participate effectively in, politics, and (2) external efficacy, referring to beliefs about the

responsiveness of governmental authorities and institutions to citizen demands” (Niemi, Craig, & Mattei, 1991, pp. 1407–8). Consequently, we expect that institutional structures will be mainly related to external political efficacy. In effect, Coleman and Davis (1976) state that:

“If external efficacy is an attitude (...) focused upon regime characteristics (...), then one must expect that the distribution of externally efficacious individuals will be in part a function of variation in regime performance. (...) unless citizen perceptions of government structures are totally random, there must be some degree of association between the reality of governmental performance and how citizens evaluate the responsiveness of their government.” (Coleman & Davis, 1976, p. 190)

There is less reason to assume that institutional structures are related to internal political efficacy, as this is more strongly dependent on individual characteristics of citizens. In the remainder of this paper, we will therefore focus exclusively on *external political efficacy*. The relation between political institutions and levels of external efficacy has been investigated mainly in the framework of electoral studies, and studies on social movement activism.

Within the literature on voting, it is argued that institutional structures have an effect on external efficacy and levels of participation, since variations in the institutional structures influence the number of choices voters have in an election, as well as the impact of their vote. Thereby these structures are likely to affect the perceived efficacy of voting in a particular country. Moreover, by affecting the levels of external efficacy of its citizens, institutional structures can increase or decrease turnout (Brockington, 2004; Geys, 2006; Karp & Banducci, 2008).

Within the literature on social movements, studies on the political opportunity structure indicate that the beliefs citizens have about the effectiveness of social movements and consequently their propensity to participate in them, is influenced by institutional structures (Kriesi et al., 1995; McAdam, 1982; Tarrow, 1989). A political opportunity structure (hereafter POS) has been defined as “consistent – but not necessarily formal or permanent – dimensions of the political environment that provide incentives for people to undertake collective action by affecting their expectations for success and failure” (Tarrow, 1996, p. 85). However, it cannot be assumed that all citizens are equally knowledgeable about the opportunities that are available within the political system. The perception of openness

therefore can distort the effect of the POS on actual behaviour (Gamson & Meyer, 1996). Hence, the POS approach builds on the assumption that variations in institutional structures affect the level of external efficacy of citizens. Consequently, through affecting external efficacy, institutional structures are believed to affect the capacity of social movements to mobilize (Klandermans, 1997; Kriesi et al., 1995; Lee, 2010).

While it is assumed that the institutional structure in a country is associated with the levels of external efficacy of its citizens, there is an ongoing debate about at least three aspects of this relationship: 1) exactly which institutional structures are associated with external efficacy, 2) what is the direction of that relation, and 3) is this relation the same for all groups of the population?

2.1. Which institutional structures?

Several studies have tried to enumerate in a more precise manner what kind of institutions should be associated with external efficacy. Recurring elements in this line of the literature, are federalism and the proportionality of the political system (Lijphart, 2012; Norris, 2008). In a federal system, citizens typically have access to various autonomous levels of government, and it is expected that this should have a positive influence on their level of efficacy: if one level of government is not responsive to their demands, in principle they could direct their efforts toward another level. Federal systems in general are based on principles of power sharing, and this too should render them more open for the participation efforts of citizens (Lijphart, 2012). In a proportional system too external efficacy of citizens is expected to be higher than in a majoritarian system. Electoral proportionality is taken to allow for a more adequate representation of demands and preferences within the decision making process as more and more varied groups within the population will have an opportunity to elect their representatives (Farrell, 2001). However, these assumptions have been questioned. Karp and Banducci (2008), do not find a positive relation between the number of political parties in the executive and external efficacy. They argue that while these features might be associated with more access points for citizens, simultaneously they render the political system far less transparent, and therefore also less accountable. While citizens might have more opportunities to voice their preferences, in practice they do not know what the effect of this voice will be. Corcoran et al. (2011) too, find no relation between the number of parties in parliament and efficacy, suggesting that it is not always clear what effect

higher levels of proportionality will have on the policy that is actually being pursued. Nevertheless, in line with most of the literature our starting hypothesis is:

Hypothesis 1: *Federalism and proportionality are associated with external political efficacy of citizens.*

2.2. Positive or negative relations?

In most of the older literature, it is assumed that a more open political system (operationalized as being federal, a more proportional system, with a larger number of political parties) can be associated with higher levels of external efficacy among the citizenry. As a federal system has more access points, the expectation is that citizens perceive it as more open resulting in a higher level of external efficacy (Kriesi et al., 1995; Tarrow, 1996). However, federal systems are often rather complex systems with complicated divisions of competences among the regions. Hence, it might be difficult for citizens to operate in these complex systems resulting in lower levels of external efficacy among citizens in federal systems. However, in line with most of the literature we hypothesize that:

Hypothesis 2: *There is a positive relation between federalism and the level of external political efficacy of citizens.*

In addition, within the voting literature it is assumed that proportional systems are more responsive and therefore associated with higher levels of external efficacy. In proportional systems it is easier for a wide variety of parties to participate in the electoral process, facilitating the representation of a wider variety of political preferences than in disproportional systems where just a few large parties dominate the party system. As a result, more proportional systems have been found to be related to higher levels of political efficacy. Also within the social movement literature, the expectation is that “proportional representation allows for easier access than plurality or majority methods. (...) Where there are more political parties, social movements will be more likely to find allies within the party system” (Kriesi et al., 1995, p. 29).

Yet, the assumption that proportionality is related to higher levels of external efficacy has not always been confirmed in empirical research. A more recent study from Karp

and Banducci (2008) shows that only the proportionality of electoral rules is positively related to external efficacy. The number of political parties in government coalitions, on the other hand, is negatively related to external efficacy. A possible explanation for this negative effect is coalitions are believed to be less accountable than one-party governments. Furthermore, Jackman (1987) has argued that “multipartyism assigns elections a less decisive role in government formation, depressing turnout” (Jackman, 1987, p. 405). Correspondingly, Brockington (2004) argues that while citizens in a system with proportional representation have a broader range of alternative parties to choose from, they have less impact on the composition of the executive. This lack of direct control over government formation is associated with lower levels of external efficacy. The lesson to be learned here is that the input and the output side of the political system should not be regarded in an isolated manner. Political systems with a more open input structure are associated with lower levels of system output as the openness allows only for very incremental policy changes. While citizens are better able to voice their preferences, the end result of the entire process might still be very limited (Kriesi et al., 1995, p. 27). In closed political systems, with clear majorities, on the other hand, actual policy change is still believed to be possible, and therefore citizens can expect that their participation might have a real effect on government policy. Both open and closed political systems can therefore be associated with high levels of external efficacy, if we take into account not just the input side of the political system, but also the output side. Therefore, we hypothesize that there is a curvilinear relationship between electoral proportionality and external efficacy. In very proportional systems, the scope of the voter’s choice will give citizens the idea that their voice is heard in parliament. In disproportional systems, on the other hand, the higher odds that there will be a real output response might have an equally positive effect. It has to be noted, furthermore, that this kind of curvilinear relationship has also been found with regard to political trust (Marien, 2011). This would suggest some kind of trade-off between the openness of a political system, and its actual capacity to have an impact on society.

Hypothesis 3: *There is a curvilinear relation between the proportionality of a political system and the level of external political efficacy.*

2.3. The same relation for all citizens?

Not only is there much debate about the kind of relation there is between institutional structures and external efficacy, some studies indicate that the relation between institutional structures and the level of external efficacy is not equal throughout all parts of the population. Karp and Banducci (2008), e.g., find that citizens who prefer small parties are affected stronger by disproportionality. Hellwig et al. (2010, p. 721) emphasize that, “electoral rules may have some effect on perceptions, but only as filtered by individual political dispositions”. One aspect that assumably interacts with the effect of institutional structures is political sophistication (Hellwig et al., 2010, p. 706).

Several authors have stressed the importance of political sophistication for the ability of citizens to make sense of the political system (Dalton, 2008; e.g. Dassonneville, 2012; Delli Carpini & Keeter, 1996; Lachat, 2007). It can be assumed that citizens with high levels of political sophistication are more knowledgeable about the opportunities offered by the political system, and therefore they also should be more strongly affected by the political opportunity structure than those who are oblivious to those characteristics. In addition, several indicators of political sophistication, such as education level, political interest, and political media use have been found to be important predictors of external efficacy (Newhagen, 1994; Niemi et al., 1991; Putnam, 1993, p. 110). Therefore, we hypothesize that political sophistication is a moderator for the effect of the institutional structure on external efficacy. If a citizen lacks the ability, opportunity, and/or motivation to acquire knowledge about the political system, it is less likely that his or her level of external efficacy is influenced by characteristics of the political system. The fourth hypothesis therefore reads:

Hypothesis 4: *Political sophistication moderates the impact of institutional structure on external political efficacy.*

3. Data

In order to study the relation between institutional structures and external efficacy, we use data from the International Social Survey Programme (ISSP) on Citizenship (2004). This survey offers unique data for our investigation of cross-national differences in external efficacy. We include 33 countries from this survey in our analysis using macro-level data on these political systems. As a result, we can rely on data from 44,274 respondents. This

survey, however, has two limitations. First, data were gathered using different methods in different countries: Face-to-face-interview, postal survey and self-completion questionnaire. Second, the variable for political media use as a proxy for political sophistication was only included in 20 countries, leaving us with 28,365 respondents. The analysis on media use therefore will have to be restricted to this subsample. Despite these limitations, we know of no dataset that approaches the extent of questions about citizenship included in a comparable array of national contexts.

3.1. External political efficacy

To measure external political efficacy we use three items measuring the beliefs of respondents about government responsiveness. In the first two items respondents were asked to what extent they agree with the following statements (on a scale ranging from 1: strongly agree to 5: strongly disagree): “*People like me don’t have any say about what the government does*” and “*I don’t think government cares much what people like me think*” (for a comparable operationalization, see Blais & Rubenson, 2013). Finally, respondents were asked how likely they considered serious attention from government in the case they acted against a law they perceived as unjust or harmful. In Table 1, we show the factor loadings of each of these items, which allows us to assume we are dealing with one latent concept. With a Cronbach’s Alpha of .61, the reliability of this factor is relatively low, but still acceptable. The factor weights for these items will serve as our dependent variable.

Table 1: External Political Efficacy Scale

| <i>Variable</i> | <i>External Efficacy</i> |
|---|------------------------------|
| People like me don’t have any say about what the government does (reversed) | 0.78 |
| I don’t think government cares much what people like me think (reversed) | 0.83 |
| In case of political action, serious attention government is likely | 0.63 |
| Overall proportion explained variance | 0.56 |
| Eigenvalue | 1.69 |

Note: Entries are the result of a principal component analysis on these three items. Cronbach’s Alpha = 0.61.
Source: ISSP 2004 Citizenship. N = 33,622

3.2. Political sophistication

Political sophistication consists of the opportunity, ability and motivation to acquire an understanding of politics (Delli Carpini & Keeter, 1996; Luskin, 1990). This multidimensional structure implies that the concept of political sophistication cannot be summarized in just a single measurement. First of all, an individual must have the opportunity to gain access to political information (Dalton, 2008; Delli Carpini & Keeter, 1996; Luskin, 1990). Koopmans and Olzak (2004) have stressed the importance of media for the diffusion of information about institutional structures throughout the population. In order to capture exposure to this diffusion, the use of political media is often put forward as an important indicator of political sophistication (Dalton, 2008; Guo & Moy, 1998).

Second, political sophistication implies one has the cognitive ability to interpret and structure political information meaningfully (Luskin, 1990). As Nie, Junn and Stehlik-Barry demonstrate, education is closely related to an “understanding of the principles of democratic government”, and to the development of political knowledge (1996, pp. 31–8). As a result, education is frequently used as one of the most important indicators of political sophistication (Dalton, 1984, 2008; Dassonneville, 2012; Lachat, 2007).

Third, motivation is argued to be a third element of political sophistication (Dalton, 1984; Luskin, 1990). Interest in politics will lead to information seeking behavior with regard to the way the political system operates (Prior, 2010). Political interest is therefore routinely included in measurements of political sophistication (Dalton, 1984, 2008; Dassonneville, 2012; Lachat, 2007).

In this analysis, political sophistication will thus be operationalized, using a combination of political media use, education and political interest. The ISSP dataset offers all three variables. Political media use was measured by asking respondents how often they read the political content of a newspaper on a seven-point scale, ranging from 1: “never” to 5: “every day”. The level of education was measured on a six-point scale, ranging from 0: “no formal qualification”, to 5: “university degree completed”. Finally, political interest was included with a single item “*How interested would you say you personally are in politics?*”. Answers were given on a four-point scale, ranging from 1: “not at all interested”, to 4: “very interested”.

3.3. Institutional structures

The individual level data of ISSP were measured in 2004, and therefore we use information on country level characteristics of that year, or just prior to it. As the literature review has shown, federalism and proportionality of the electoral system are the two most relevant indicators in this regard. The indexes measuring these elements were selected on the basis of the Democracy Barometer project (Bühlmann, Merkel, Müller, Giebler, & Wessels, 2011) and obtained from the sources indicated below.

To measure the degree of federalism, the work of Gerring and Thacker (2004) is one of the most used indicators. Since there is a relative consensus about this measure, we build on their work as well. For electoral proportionality a number of indicators can be used, and we include four of them. First, we use the *least squares index* from Gallagher (2012) (hereafter Gallagher Index), which indicates the proportionality of the translation of vote shares into seats in parliament. Second, the vote threshold for representation, referring to the percentage of the national vote a party needs to gain at least one seat in parliament, has often been used as an important indicator of proportionality as well (Lijphart, 2012; Selb, 2008). To include this variable in our model we use data from the World Bank's Database of Political Institutions (Beck, Clarke, Groff, Keefer, & Walsh, 2001), completed by data from the Democracy Barometer for countries missing in the World Bank data (Bühlmann et al., 2011).¹ These data only refer to the legal threshold, as imposed by electoral law, and not to the effective, which is usually a function of district magnitude. Two different operationalisations of the number of parties are included in this study. The effective number of parties expresses the fractionalization of the parliamentary assembly (Gallagher, 2012). Finally, we include the absolute number of parties in parliament, as Karp and Banducci (2008) have argued that the absolute number of parties is more relevant for the attitudes and behavior of citizens, since this is more readily observable for citizens. An overview of the descriptive results of these variables per country can be found in appendix.

3.4. Control Variables: Age, Gender and Corruption

In most research age and gender have been found to be important determinants of political efficacy (Blais & Rubenson, 2013; Burns, Schlozman, & Verba, 2001) and therefore these will be included as control variables at the individual level.

At the country level, corruption has been found to have an important impact on political attitudes like external efficacy, because “corruption violates fundamental tenets of democracy such as equality, fairness, and accountability” (Anderson & Tverdova, 2003, p. 104). We therefore control for this variable in our models on the basis of the Corruption Perceptions Index by Transparency International (2004) (see appendix).

4. Models and Results

We start our analysis with an investigation of the direct relation between the institutional structures and external efficacy, testing Hypotheses 1 to 3. Since the respondents are nested within 33 countries we conduct a multi-level analysis. As the dependent variable is continuous we conduct a linear two-level model.

Model 0 (Table 2) represents the intercept-only model in which the variance is split into two uncorrelated components: the variance between individuals within each country (individual-level variance, σ_e^2) and the variance between the 33 countries (country-level variance, σ_{u0}^2). This model does not contain any independent variables and it can thus serve as a benchmark with which the following models can be compared. While most of the variance is situated at the level of the individual, we still observe a sizeable intra class correlation of 13 per cent at the country-level.

In the next step we introduce the individual-level variables into the model.² As Model I shows, the level of education and political interest are positively related to external efficacy. An additional analysis – but only on the 20 countries where data are available – shows that the third indicator of political sophistication, political media use, is also positively associated with external efficacy (see Appendix, Table A.5, Model I). Model I (Table 2), in which we also control for gender and age, explains roughly 9 per cent of the individual-level variance and about 4.6 per cent of the country-level variance.

We introduce the grand-mean centered institutional structure variables one by one in the following models in order to avoid multicollinearity and overspecification of the model. Moreover, we include in all of the following models the Corruption Perception Index as a country-level control variable. In Model II we introduce the degree of federalism, but contrary to Hypothesis 2, the results show that the degree of federalism is not significantly related to external efficacy. Moreover, the results of Models III and IV show that neither the effective nor the absolute number of parties is significantly related to external efficacy. In

Models V and VI it can be observed that also the proportionality of the translation of votes into seats nor the electoral threshold are significantly related to external efficacy. We clearly find no evidence supporting the first hypothesis when examining the linear relation between the institutional structures and external efficacy.

Table 2: Country and Individual Level Effects on External Political Efficacy

| | External Political Efficacy | | | | | | |
|-----------------------------------|-----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | 0 | I | II | III | IV | V | VI |
| Intercept | 0.002 (0.063) | -0.044 (0.062) | -0.034 (0.057) | -0.045 (0.059) | -0.042 (0.059) | -0.043 (0.059) | -0.046 (0.056) |
| <i>Individual-Level Variables</i> | | | | | | | |
| Gender (Male = 1) | | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) |
| Age | | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) |
| Level of Education | | 0.113*** (0.004) | 0.113*** (0.004) | 0.113*** (0.004) | 0.113*** (0.004) | 0.113*** (0.004) | 0.113*** (0.004) |
| Political Interest | | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) |
| <i>Country-Level Variables</i> | | | | | | | |
| Federalism | | | 0.062 (0.037) | | | | |
| Effective Number of Parties | | | | -0.030 (0.033) | | | |
| Number of Parties in Parliament | | | | | 0.013 (0.021) | | |
| Gallagher Index ⁽⁺⁾ | | | | | | -0.010 (0.013) | |
| Legal Threshold ⁽⁺⁾ | | | | | | | 0.055 (0.029) |
| Perceived Corruption Index | | | 0.053 (0.028) | 0.042 (0.029) | 0.047 (0.029) | 0.046 (0.029) | 0.021 (0.031) |
| σ_e^2 | 0.878 | 0.797 | 0.797 | 0.797 | 0.797 | 0.797 | 0.797 |
| σ_{u0}^2 | 0.131 | 0.125 | 0.106 | 0.112 | 0.114 | 0.113 | 0.103 |
| Deviance | 91,204 | 87,943 | 87,937 | 87,939 | 87,940 | 87,940 | 87,937 |

Note: Entries are parameter estimates and standard errors (in parentheses) of a multilevel linear regression. All models include 33,622 individuals on the first level and 33 countries on the second level.

⁽⁺⁾ The Gallagher Index and the legal threshold are inverted so that higher values indicate more proportionality.

Sign.: * < 0.05, ** < 0.01, *** < 0.001.

However, in line with hypothesis 3, we expect a curvilinear relationship between proportionality and external efficacy.³ Therefore, in Table 3 we model the relationship between proportionality and external political efficacy in a curvilinear way by including also the squared terms of the four indicators of proportionality. As Table 3 shows, there is indeed a curvilinear relationship between proportionality and external efficacy, when

proportionality is measured with the Gallagher Index (Model IX). External efficacy is thus high in both very proportional and very disproportional political systems. Model IX explains about 9 per cent of the individual-level variance and about 38 per cent of the country-level variance, and it is therefore the most powerful Model in this Table.

Table 3: Curvilinear Relations between Proportionality and External Political Efficacy

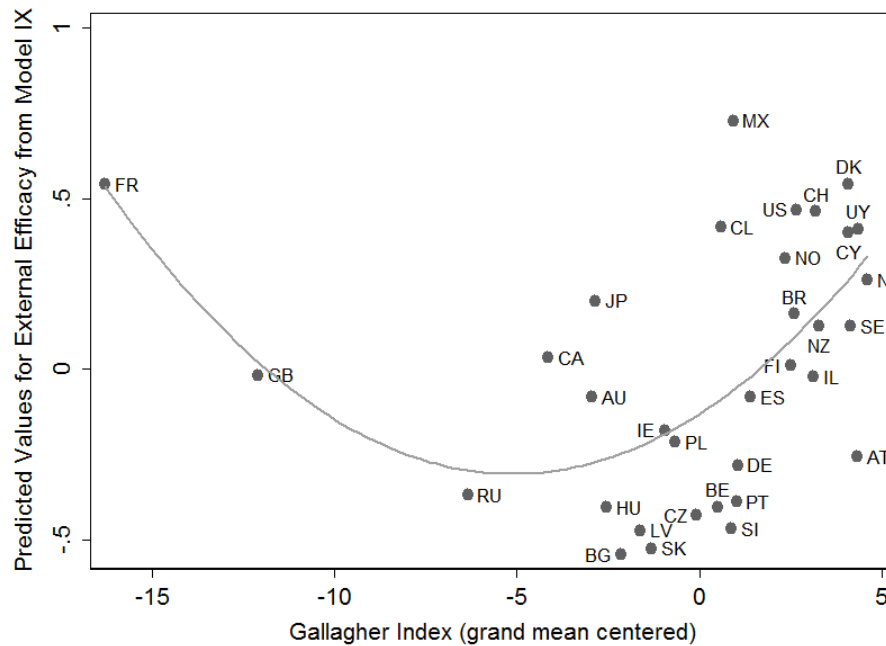
| | External Political Efficacy | | | |
|--|-----------------------------|----------------------|----------------------|----------------------|
| | VII | VIII | IX | X |
| Intercept | -0.068 (0.080) | -0.091 (0.077) | -0.167** (0.061) | 0.163 (0.138) |
| <i>Individual-Level Variables</i> | | | | |
| Gender (Male = 1) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) |
| Age | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) |
| Level of Education | 0.113*** (0.004) | 0.113*** (0.004) | 0.113*** (0.004) | 0.113*** (0.004) |
| Political Interest | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) |
| <i>Country-Level Variables</i> | | | | |
| Effective Number of Parties | -0.041 (0.041) | | | |
| Effective Number of Parties ² | 0.007 (0.016) | | | |
| Number of Parties in Parliament | | 0.008 (0.021) | | |
| Number of Parties in Parliament ² | | 0.006 (0.006) | | |
| Gallagher Index ⁽⁺⁾ | | | 0.067** (0.019) | |
| Gallagher Index ^{2 (+)} | | | 0.006*** (0.002) | |
| Legal Threshold ⁽⁺⁾ | | | | 0.045 (0.028) |
| Legal Threshold ^{2 (+)} | | | | -0.041 (0.025) |
| Perceived Corruption Index | 0.044 (0.030) | 0.048 (0.028) | 0.006 (0.027) | 0.024 (0.030) |
| σ_e^2 | 0.797 | 0.797 | 0.797 | 0.797 |
| σ_{u0}^2 | 0.112 | 0.111 | 0.081 | 0.096 |
| Deviance | 87,939 | 87,939 | 87,929 | 87,934 |

Note: Entries are parameter estimates and standard errors (in parentheses) of a multilevel linear regression. All models include 33,622 individuals on the first level and 33 countries on the second level.

⁽⁺⁾ The Gallagher Index and the legal threshold are inverted so that higher values indicate more proportionality. Sign.: * < 0.05, ** < 0.01, *** < 0.001.

This curvilinear relationship is visualized in Figure 1 in which the predicted values for external efficacy resulting from Model VI are plotted against the Gallagher Index.

Figure 1: Visualizing the Curvilinear Relation between the Gallagher Index and External Efficacy

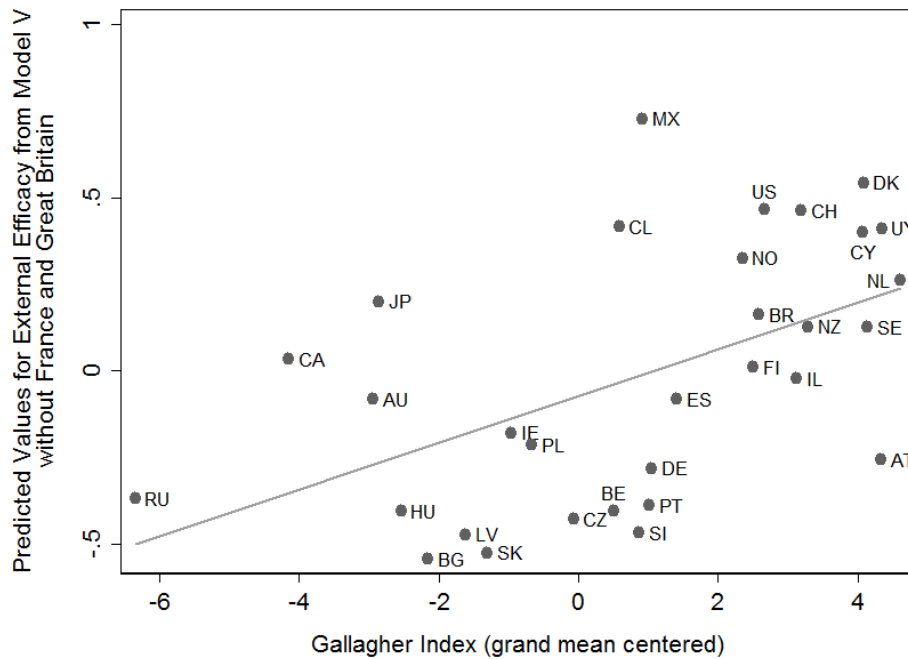


Note: Values are predicted based on Model IX (Table 3) on average by country. The Gallagher Index is inverted so that higher values indicate more proportionality and grand mean centered. N=33 countries.

Looking at Figure 1, it becomes clear that the curvilinear relationship between the Gallagher Index and external efficacy is a result of the high predicted values for external efficacy in France and Great Britain. In the entire sample, these two countries clearly are extremely disproportional while at the same time their public opinion shows high levels of political efficacy. It is tempting to consider these two countries as mere outliers. However, we see two good reasons to keep them in the analysis. First, France and Great Britain typically can be seen as the idealtypes of a majoritarian closed political system (Lijphart, 2012). Removing those two cases would actually mean that the Lijphart thesis is no longer adequately tested, as we would only have data from more or less proportional political systems. That would imply that we could only test the Lijphart thesis in about half of the political spectrum. Second, it has to be noted that these are both very large democratic political systems, so for this pragmatic reason to, it might be difficult just to cast

them away as an outlier. Nevertheless, when we visualize the effect of proportionality on just 31 countries, without France and Great Britain, it becomes obvious that for the other countries, the relation is clearly linear (Figure 2). We return to this finding in our concluding section.

Figure 2: The effect of the Gallagher Index on External Efficacy (without Great Britain and France)



Note: Values are predicted based on Model V (Table 2) on average by country. The Gallagher Index is inverted so that higher values indicate more proportionality and grand mean centered. N=31 countries.

In Model X we conduct the same analysis for the electoral threshold, but here we do not find any indication for a curvilinear relation. Hypothesis 2 therefore receives only limited support. We find a curvilinear relation of the Gallagher Index on proportionality, but not for other possible indicators for openness. Furthermore it has to be acknowledged that this pattern of curvilinearity is purely driven by the cases of Great Britain and France, who have a very disproportional electoral system, compared to all other countries included in the sample. Without these two countries, there would not be any curvilinear relation at all.

In our fourth hypothesis we assumed that political sophistication would serve as a moderator for the country level effects. A precondition to this assumption is that the relationship between political sophistication and external efficacy varies across the different political systems. In order to test this assumption we allow the slopes of the political

sophistication variables to vary across the different countries. We find that the slopes of the level of education, political interest and political media use are significantly random (see Appendix), and we can therefore proceed with our analysis.⁴

In order to test the third hypothesis we introduce – again one by one – cross-level interaction terms which combine the three indicators of political sophistication with the indicators of the institutional structure. It becomes apparent that there are three significant positive cross-level interaction effects (Table 4, for the models with non-significant interactions, see Appendix). Model XI indicates the occurrence of an interaction effect between the electoral threshold in a country and the education level of the respondent. This model explains about 16 per cent of the variance of the slope of education. In Model XII we find a similar interaction effect between the electoral threshold and political interest. Model XII explains roughly 15 per cent of the variance of the slope of political interest. For political media use the interaction with the threshold is not significant. However, as displayed in Model XIII, we find a small significant effect of the interaction between political media use and the Gallagher Index, indicating that the positive effect of political media use is strengthened in proportional electoral systems. Model XIII explains about 36.6 percent of the random slope variance of political media use.

Table 4: The Moderating Effect of Political Sophistication on External Political Efficacy

| | External Political Efficacy | | | | | |
|--|-----------------------------|---------|-----------|---------|-----------|---------|
| | XI | | XII | | XIII | |
| Intercept | -0.055 | (0.056) | -0.044 | (0.057) | -0.193*** | (0.053) |
| <i>Individual-Level Variables</i> | | | | | | |
| Gender (Male = 1) | 0.037*** | (0.010) | 0.036*** | (0.010) | 0.030* | (0.012) |
| Age | -0.004*** | (0.000) | -0.004*** | (0.000) | -0.004*** | (0.000) |
| Level of Education | 0.118*** | (0.009) | 0.112*** | (0.004) | 0.105*** | (0.005) |
| Political Interest | 0.228*** | (0.006) | 0.230*** | (0.015) | 0.176*** | (0.008) |
| Political Media Use | | | | | 0.050*** | (0.007) |
| <i>Country-Level Variables</i> | | | | | | |
| Gallagher Index ⁽⁺⁾ | | | | | 0.067*** | (0.016) |
| Gallagher Index ²⁽⁺⁾ | | | | | 0.007*** | (0.001) |
| Legal Threshold ⁽⁺⁾ | 0.041 | (0.028) | 0.057* | (0.029) | | |
| Perceived Corruption Index | 0.042 | (0.029) | 0.011 | (0.031) | 0.026 | (0.023) |
| <i>Cross-Level Interactions</i> | | | | | | |
| Level of Education * Legal Threshold ⁽⁺⁾ | 0.009* | (0.004) | | | | |
| Political Interest * Legal Threshold ⁽⁺⁾ | | | 0.015* | (0.007) | | |
| Political Media Use * Gallagher Index ⁽⁺⁾ | | | | | 0.003* | (0.001) |
| σ_e^2 | 0.792 | | 0.792 | | 0.799 | |
| σ_{u0}^2 | 0.100 | | 0.106 | | 0.039 | |
| $\sigma_{Level\ of\ Education}^2$ | 0.002 | | | | | |
| $\sigma_{Political\ Interest}^2$ | | | 0.006 | | | |
| $\sigma_{Political\ Media\ Use}^2$ | | | | | 0.000 | |
| Deviance | 87,805 | | 87,791 | | 56,222 | |
| N _{individuals} | 33,622 | | 33,622 | | 21,476 | |
| N _{countries} | 33 | | 33 | | 20 | |

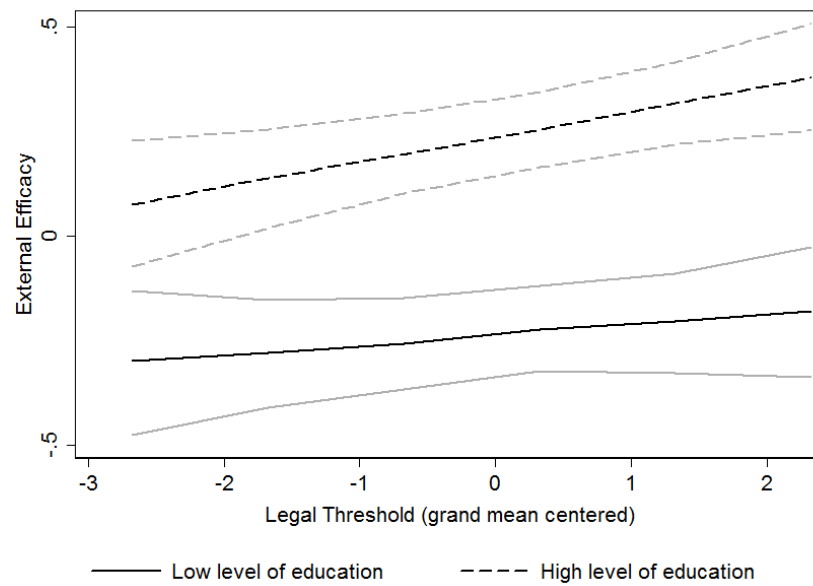
Note: Entries are parameter estimates and standard errors (in parentheses) of a multilevel linear regression.

⁽⁺⁾ The Gallagher Index and the legal threshold are inverted so that higher values indicate more proportionality.

Sign.: * < 0.05, ** < 0.01, *** < 0.001.

However, based on the information in Table 4 we can only draw conclusions about the interaction effects when their constitutive terms are 0 (which is the average as these variables are grand mean centered) (Brambor, Clark, & Golder, 2005). Therefore we present three figures that illustrate the interaction effects graphically. Figure 3 clearly shows that the interaction effect is significant for all levels of legal threshold. The difference in external efficacy between citizens with high and low education is larger in countries with a lower threshold. We find a similar picture looking at the interaction between political interest and the legal threshold.

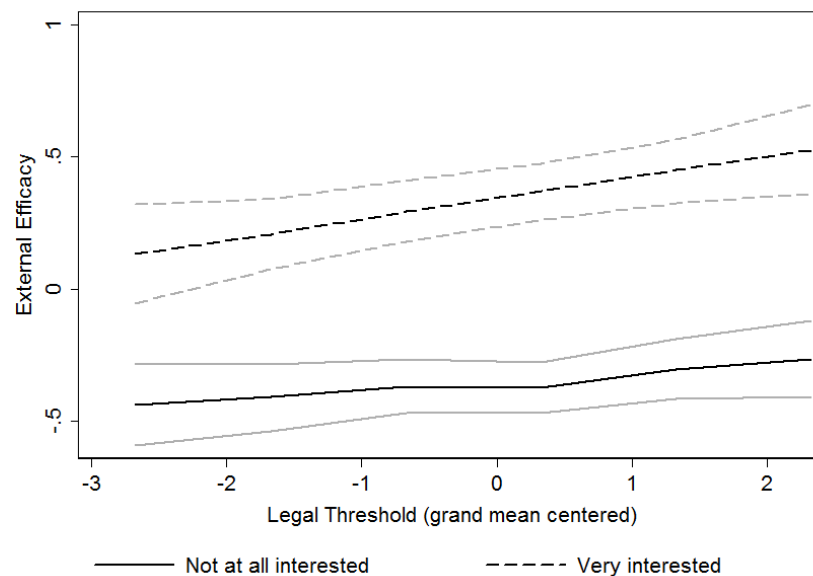
Figure 3: Interaction effect of electoral threshold and education level on external efficacy



Note: Cross-level interaction effect between the level of education and the legal threshold. The graph is based on Model XI, holding other covariates constant. Simulations were used to obtain confidence intervals. Low level of education refers to lowest formal qualification, whereas high level of education refers to a completed university degree.

For the level of external efficacy of respondents with little political interest it matters less in which type of system they are living. Again, this interaction is significant for all levels of legal threshold (Figure 4).

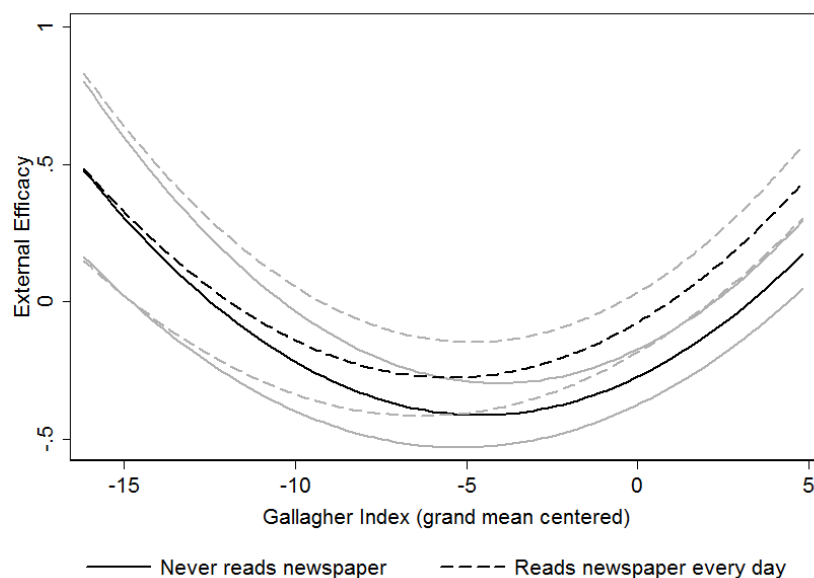
Figure 4: Interaction effect of political interest and the legal threshold on external efficacy



Note: Cross-level interaction effect between the political interest and the legal threshold. The graph is based on Model XII, holding other covariates constant. Simulations were used to obtain confidence intervals.

In Figure 5 we do exactly the same for the interaction between political media use and electoral proportionality (based on only 20 countries). It appears that only in systems that have an inverted Gallagher Index which is larger than average (the average is indicated by 0), there is there a significant difference in the efficacy of people who read the newspaper on a daily basis compared to those who never read it. The external efficacy of respondents who read the newspaper on a daily basis differs only significantly from the external efficacy of respondents who never read the newspaper in systems that score roughly between -1 and 4 on the (inverted and grand mean centered) Gallagher Index scale. In very proportional systems such as Sweden and the Netherlands, there is no difference in the external efficacy of the two groups.

Figure 5: Interaction effect of political media use and the Gallagher Index on external efficacy



Note: Cross-level interaction effect between the newspaper reading and the legal threshold. The graph is based on Model XIII, holding other covariates constant. Simulations were used to obtain confidence intervals.

To summarize, Hypothesis 1 can only be confirmed to some extent, as we find that only the proportionality of vote to seat calculation has a significant effect on external efficacy. We find no such effect for the legal threshold, the effective and absolute number of parties in parliament, and federalism. The second hypothesis, is also only partly confirmed: there is a curvilinear relationship between proportionality and external efficacy, but it is only true when proportionality is measured with the Gallagher Index. Finally, our findings confirm

that for a number of indicators, politically sophisticated individuals are indeed affected more strongly by variations in institutional structures, thus confirming Hypothesis 4.

5. Conclusion

The institutional structures of political systems affect the political attitudes of their citizens. However, it has remained less clear which structures are relevant in this regard; whether they render citizens efficacious or powerless; and whether this is true for all parts of the population. In this paper we have addressed these three problems.

First, in this study only a direct relation between the proportionality of vote to seat calculation and external efficacy was found. No such relation was found for legal thresholds, the effective of absolute number of parties in parliament, nor federalism. As such, these findings qualify studies like Kriesi et al. (1995), that argue that each of these institutional structures should affect the beliefs of citizens about government responsiveness. The proportionality of the electoral system is indeed associated with external efficacy, but the same cannot be said for the other indicators that are being used in this kind of studies. Federalism is obviously not related to external efficacy, and it seems a straightforward assumption to relate this to the complexity and the lack of perceived accountability of this kind of political systems.

Second, the effect of electoral proportionality on external political efficacy was curvilinear. This finding supports Hypothesis 3 that both more proportional, as well as more disproportional systems are associated with higher levels of external efficacy. The current analysis does not offer us all that much information about how we can explain this relation, but the analysis makes clear that the British and the French political system are the main driving force for this curvilinear pattern. Despite the fact that both countries are highly disproportional, in practice they do allow for strong controls on accountability, and for an alternation in power. During the past decades both countries have repeatedly switched between left and right wing majorities. We could hypothesize therefore, that this implies that both conservatives and liberals do have the feeling that they can actually change government policy, if only their side would win the elections. Our analysis, therefore, to a large extent qualifies the rather negative outlook of authors like Lijphart and Kriesi on these systems, that are being portrayed as lacking democratic responsiveness. This might be true at any specific moment of time, as both in France as in Great Britain, opposition parties have very few opportunities to have an impact on government policy. If we take a longer observation,

period, however, Labour and the Conservatives in the UK, and the Socialists and the right wing parties in France have repeatedly switched government positions, which might be described as a form of longitudinal power sharing. The supporters of the opposition party therefore, do not necessarily have low levels of external efficacy, since they still have the memory that their party used to be in government, and they can have a reasonable hope that their party will gain power again in the foreseeable future. In closed political systems, opposition supporters, and citizens in general, are not as powerless as is sometimes assumed. We have to acknowledge, however, that this relation is only visible in extremely disproportional countries like the United Kingdom and France, and could not be found in other countries with moderate levels of (dis)proportionality.

Third, we find some evidence for the hypothesis that the relation between the institutional structures and external efficacy is stronger among individuals with more political sophistication. We find that the relation between legal thresholds and external efficacy is stronger among individuals with more political sophistication as measured by education and political interest. The relation between electoral proportionality and external efficacy is slightly stronger among users of political media. Although the size of these moderating effects remained limited, apparently politically sophisticated citizens are indeed better able to pick the signals being sent out of the political systems. It would be tempting to speculate that those with higher levels of political sophistication are more knowledgeable about whether their political system actually imposes an electoral threshold or not, and how high this threshold is. The current data however, do not allow us to ascertain whether better knowledge is indeed the explanation for this interaction effect, and this would require a more reliable measurement of political knowledge.

6. References

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Appendix

Table A.1: Descriptive Statistics of Variables included in the Analysis

| Variable | Number of Observations | Mean | Standard Deviation | Min. | Max. |
|------------------------------------|---------------------------|--------|-----------------------|--------|-------|
| <i>Dependent Variable</i> | | | | | |
| External Political Efficacy | 38,660 | 0.000 | 1 | -1.62 | 2.88 |
| <i>Individual-Level Variables</i> | | | | | |
| Gender (Male = 1) | 44,241 | 0.466 | 0.499 | 0 | 1 |
| Age | 43,941 | 46.866 | 17.331 | 15 | 98 |
| Level of Education | 43,921 | 2.695 | 1.469 | 0 | 5 |
| Political Interest | 43,532 | 2.414 | 0.877 | 1 | 4 |
| Political Media Use | 28,365 | 2.854 | 1.430 | 1 | 5 |
| <i>Country-Level Variables</i> | | | | | |
| Federalism | 33 | 2.436 | 1.592 | 1 | 5 |
| Effective Number of Parties | 33 | 4.778 | 1.912 | 2.18 | 9.28 |
| Number of Parties in Parliament | 33 | 7.461 | 2.816 | 3 | 14 |
| Gallagher Index (inverted) | 33 | -5.658 | 4.421 | -21.95 | -1.05 |
| Legal Threshold (inverted) | 33 | -2.363 | 2.232 | -5 | 0 |
| Perceived Corruption Index | 33 | 6.784 | 2.079 | 2.8 | 9.7 |

Note: In total, the dataset contains 44,274 respondents when Italy, South Africa and South Korea are dropped. *Source:* ISSP 2004 Citizenship.

Table A.2: Institutional structures per country.

| | Federalism | Gallagher Index (inverted) | Legal Threshold (inverted) | Effective number of parties | Absolute number of parties | Perceived corruption | Average external efficacy (factor scores) |
|----------------|------------|----------------------------------|----------------------------------|-----------------------------------|----------------------------------|-------------------------|---|
| Australia | 5 | -8.6 | 0 | 3.17 | 5 | 8.8 | -.11 |
| Austria* | 2 | -1.33 | -4 | 3.02 | 4 | 8.4 | -.29 |
| Belgium | 2 | -5.16 | -5 | 8.84 | 10 | 7.5 | -.40 |
| Brazil | 5 | -3.07 | -5 | 9.28 | 11 | 3.9 | .12 |
| Bulgaria | 1 | -7.82 | -4 | 3.91 | 4 | 4.1 | -.55 |
| Canada | 3 | -9.81 | 0 | 3.78 | 5 | 8.5 | -.01 |
| Chile* | 3 | -5.08 | -5 | 6.56 | 3 | 7.4 | .41 |
| Cyprus* | 1 | -1.59 | -2 | 3.76 | 8 | 5.4 | .41 |
| Czech Republic | 2 | -5.73 | -5 | 4.82 | 4 | 4.2 | -.43 |
| Denmark | 1 | -1.58 | 0 | 4.69 | 8 | 9.5 | .51 |
| Finland | 1 | -3.16 | 0 | 5.65 | 9 | 9.7 | -.02 |
| France | 2 | -21.95 | 0 | 5.22 | 11 | 7.1 | .57 |
| Germany* | 5 | -4.61 | -5 | 4.09 | 6 | 8.2 | -.33 |
| Great Britain* | 2 | -17.76 | 0 | 3.33 | 11 | 8.6 | -.03 |
| Hungary | 1 | -8.2 | -5 | 2.94 | 3 | 4.8 | -.40 |
| Ireland* | 1 | -6.62 | 0 | 4.13 | 8 | 7.5 | -.19 |
| Israel* | 1 | -2.53 | -1.5 | 7.05 | 13 | 6.4 | -.03 |
| Japan | 2 | -8.52 | 0 | 3.26 | 7 | 6.9 | .19 |
| Latvia | 1 | -7.28 | -5 | 6.78 | 6 | 4 | -.46 |
| Mexico* | 5 | -4.74 | -2 | 3.19 | 6 | 3.6 | .74 |
| Netherlands | 1 | -1.05 | -1 | 4.99 | 9 | 8.7 | .24 |
| New Zealand | 1 | -2.37 | -5 | 4.17 | 7 | 9.6 | .13 |
| Norway* | 2 | -3.31 | 0 | 3.31 | 9 | 8.9 | .26 |
| Poland* | 2 | -6.33 | -5 | 4.5 | 7 | 3.5 | -.24 |
| Portugal | 1 | -4.64 | 0 | 3.03 | 6 | 6.3 | -.39 |
| Russia | 5 | -12.01 | -5 | 6.61 | 11 | 2.8 | -.36 |
| Slovakia | 1 | -6.97 | -5 | 8.87 | 7 | 4 | -.53 |
| Slovenia* | 1 | -4.79 | 0 | 6.02 | 8 | 6 | -.48 |
| Spain | 3 | -4.25 | -3 | 3 | 9 | 7.1 | -.09 |
| Sweden | 1 | -1.52 | -4 | 4.51 | 7 | 9.2 | -.08 |
| Switzerland | 5 | -2.47 | 0 | 5.44 | 14 | 9.1 | -.45 |
| United States* | 5 | -2.99 | 0 | 2.18 | 3 | 7.5 | .47 |
| Uruguay | 1 | -1.32 | 0 | 2.49 | 4 | 6.2 | .39 |
| Mean | 2.27 | -5.73 | -2.32 | 4.75 | 7.36 | 6.77 | .01 |

Note: Countries with * are not part of the small sample measuring political media use. Countries that were left out are: the Philippines, Venezuela, Taiwan, South Africa, and South Korea. Data are from 2004 or in the case of the effective number of parties and absolute number of parties from the most recent elections in 2004.

Table A.3: Models containing cross-level interactions with the level of education

| | External Efficacy | | | | |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|
| | I | II | III | IV | V |
| Intercept | -0.054 (0.060) | -0.053 (0.058) | -0.052 (0.058) | -0.175** (0.058) | -0.043 (0.056) |
| <i>Individual-Level Variables</i> | | | | | |
| Gender (Male = 1) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) | 0.037*** (0.010) |
| Age | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) |
| Level of Education | 0.119*** (0.010) | 0.119*** (0.009) | 0.119*** (0.010) | 0.119*** (0.009) | 0.118*** (0.010) |
| Political Interest | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) | 0.228*** (0.006) |
| <i>Country-Level Variables</i> | | | | | |
| Effective Number of Parties | | -0.020 (0.032) | | | |
| Number of Parties in Parliament | | | 0.014 (0.020) | | |
| Gallagher Index | | | | 0.063** (0.018) | |
| Gallagher Index ² | | | | 0.006*** (0.002) | |
| Federalism | | | | | 0.059 (0.036) |
| Perceived Corruption Index | | 0.062* (0.028) | 0.064* (0.027) | 0.026 (0.025) | 0.069** (0.026) |
| <i>Cross-Level Interactions</i> | | | | | |
| Level of Education * Effective Number of Parties | | -0.008 (0.005) | | | |
| Level of Education * Number of Parties in Parliament | | | -0.001 (0.003) | | |
| Level of Education * Gallagher Index | | | | 0.004 (0.002) | |
| Level of Education * Federalism | | | | | -0.004 (0.006) |
| σ_e^2 | 0.792 | 0.792 | 0.792 | 0.792 | 0.792 |
| σ_{u0}^2 | 0.118 | 0.108 | 0.108 | 0.077 | 0.102 |
| $\sigma_{Level\ of\ Education}^2$ | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| Deviance | 87,818 | 87,810 | 87,813 | 87,797 | 87,811 |

Note: Entries are parameter estimates and standard errors (in parentheses) of a multilevel linear regression. All models include 33,622 individuals on the first level and 33 countries on the second level.

Sign.: * < 0.05, ** < 0.01, *** < 0.001.

Table A.4: Models containing cross-level interactions with political interest

| | External Efficacy | | | | |
|---|---------------------|----------------------|----------------------|----------------------|----------------------|
| | I | II | III | IV | V |
| Intercept | -0.041 (0.062) | -0.042 (0.059) | -0.039 (0.060) | -0.168** (0.060) | -0.031 (0.058) |
| <i>Individual-Level Variable</i> | | | | | |
| Gender (Male = 1) | 0.036*** (0.010) | 0.036*** (0.010) | 0.036*** (0.010) | 0.036*** (0.010) | 0.036*** (0.010) |
| Age | 0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) |
| Level of Education | 0.112*** (0.004) | 0.112*** (0.004) | 0.112*** (0.004) | 0.112*** (0.004) | 0.112*** (0.004) |
| Political Interest | 0.231*** (0.016) | 0.231*** (0.016) | 0.231*** (0.016) | 0.231*** (0.016) | 0.229*** (0.016) |
| <i>Country-Level Variable</i> | | | | | |
| Effective Number of Parties | | -0.034 (0.033) | | | |
| Number of Parties in Parliament | | | 0.015 (0.021) | | |
| Gallagher Index | | | | 0.070*** (0.019) | |
| Gallagher Index ² | | | | 0.006*** (0.002) | |
| Federalism | | | | | 0.058 (0.038) |
| Perceived Corruption Index | | 0.027 (0.029) | 0.028 (0.028) | -0.011 (0.026) | 0.029 (0.026) |
| <i>Cross-Level Interactions</i> | | | | | |
| Political Interest * Effective Number of Parties | | -0.014 (0.008) | | | |
| Political Interest * Number of Parties in Parliament | | | -0.000 (0.006) | | |
| Political Interest * Gallagher Index | | | | 0.005 (0.003) | |
| Political Interest * Federalism | | | | | -0.017 (0.010) |
| σ_e^2 | 0.792 | 0.792 | 0.792 | 0.792 | 0.792 |
| σ_{u0}^2 | 0.126 | 0.114 | 0.116 | 0.081 | 0.110 |
| $\sigma_{Political\ Interest}^2$ | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| Deviance | 87,799 | 87,795 | 87,798 | 87,783 | 87,791 |

Note: Entries are parameter estimates and standard errors (in parentheses) of a multilevel linear regression. All models include 33,622 individuals on the first level and 33 countries on the second level.

Sign.: * < 0.05, ** < 0.01, *** < 0.001.

Table A.5: Models containing cross-level interactions with political media use

| | External Efficacy | | | | | | |
|---|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | 0 | I | II | III | IV | V | VI |
| Intercept | -0.021 (0.080) | -0.049 (0.077) | -0.049 (0.077) | -0.053 (0.065) | -0.045 (0.062) | -0.044 (0.065) | -0.058 (0.060) |
| <i>Individual-Level Variables</i> | | | | | | | |
| Gender (Male = 1) | | 0.029* (0.012) | 0.030* (0.012) | 0.029* (0.012) | 0.029* (0.012) | 0.029* (0.012) | 0.029* (0.012) |
| Age | | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) | -0.004*** (0.000) |
| Level of Education | | 0.106*** (0.005) | 0.105*** (0.005) | 0.105*** (0.005) | 0.105*** (0.005) | 0.105*** (0.005) | 0.105*** (0.005) |
| Political Interest | | 0.176*** (0.008) | 0.176*** (0.008) | 0.175*** (0.008) | 0.175*** (0.008) | 0.175*** (0.008) | 0.175*** (0.008) |
| Political Media Use | | 0.050*** (0.005) | 0.050*** (0.008) | 0.050*** (0.007) | 0.049*** (0.008) | 0.049*** (0.007) | 0.050*** (0.007) |
| <i>Country-Level Variables</i> | | | | | | | |
| Effective Number of Parties | | | | -0.015 (0.035) | | | |
| Number of Parties in Parliament | | | | | 0.038 (0.023) | | |
| Federalism | | | | | | 0.039 (0.042) | |
| Legal Threshold | | | | | | | 0.059 (0.032) |
| Perceived Corruption Index | | | | 0.073* (0.031) | 0.065* (0.027) | 0.078** (0.028) | 0.046 (0.033) |
| <i>Cross-Level Interactions</i> | | | | | | | |
| Political Media Use * Effective Number of Parties | | | | -0.005 (0.003) | | | |
| Political Media Use * Number of Parties in Parliament | | | | | -0.003 (0.003) | | |
| Political Media Use * Federalism | | | | | | -0.007 (0.004) | |
| Political Media Use * Legal Threshold | | | | | | | 0.005 (0.003) |
| σ_e^2 | 0.874 | 0.800 | 0.799 | 0.799 | 0.799 | 0.799 | 0.799 |
| σ_{u0}^2 | 0.128 | 0.116 | 0.116 | 0.083 | 0.075 | 0.080 | 0.071 |
| $\sigma_{Political Media Use}^2$ | | | 0.001 | 0.001 | 0.001 | 0.000 | 0.000 |
| Deviance | 58,150 | 56,259 | 56,247 | 56,240 | 56,238 | 56,238 | 56,236 |

Note: Entries are parameter estimates and standard errors (in parentheses) of a multilevel linear regression. All models include 21,476 individuals on the first and 20 countries on the second level.

Sign.: * < 0.05, ** < 0.01, *** < 0.001.

Endnotes

¹. We multiply the least squares index and the legal threshold by -1, so to establish that higher values indicate more proportionality and lower legal thresholds.

². The individual-level variables are grand-mean centered except for gender.

³. Based on the literature we did not expect a curvilinear relation between federalism and external efficacy. However, if we included federalism-squared, the effect is 0.005 with a standard error of 0.037, which is not significant.

⁴. Again, this effect is tested based on a limited sample of 20 countries.